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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

**Listing of Claims**:

1. (Currently Amended) A composition comprising a therapeutically active compound covalently bonded to a guanidinoaminoglycoside; wherein the therapeutically active compound is selected from the group consisting of a nucleic acid, nucleoside, protein,

peptide, amino acid residue, and dye.

2. - 8. (Cancelled).

9. (Currently Amended) The composition of claim 1, wherein the therapeutically active

compound is selected from the group consisting of a nucleic acid, nucleoside, protein,

peptide, amino acid residue, lipid, carbohydrate, synthetic organic compound, metal, vitamin,

small molecule, and dye, isotope, antibody, toxin and ligand.

10. (Previously Presented) The composition of claim 1, wherein the therapeutically active

compound comprises a nucleoside, wherein the nucleoside is a reverse transcriptase inhibitor.

11. (Original) The composition of claim 10, wherein the reverse transcriptase inhibitor is

selected from the group consisting of 3'-azido-3'-deoxythymidine, 2',3'-dideoxyinosine and

2',3'-dideoxycytidine.

12. (Cancelled).

13. (Currently Amended) The composition of elaim 10 claim 1, wherein the

guanidinoaminoglycoside is selected from the group consisting of guanidino-amikacin,

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guanidino-gentamicin, guanidino-kanamycin, guanidino-neomycin, guanidino-netilmicin, guanidino-O-2,6-diamino-2,6-dideoxy-beta-L-idopyranosyl-(1 to 3)-O-beta-D-ribofuranosyl-(1 to 5)-O-[2-amino-2-deoxy-alpha-D-glucopyranosyl-(1 to 4)]-2-deoxystreptamine, guanidino-streptomycin and guanidino-tobramycin.

- 14. (Currently Amended) A method of increasing the cellular uptake of a therapeutically active compound, comprising:
  - (a) modifying a dialkoxy substance, wherein the dialkoxy substance is an aminoglycoside, by treating the dialkoxy substance with a guanidinylating reagent to form an adduct, wherein the adduct is a guanidinoaminoglycoside;
  - (b) covalently bonding the adduct to the therapeutically active compound to form a conjugate, wherein the therapeutically active compound is selected from the group consisting of a nucleic acid, nucleoside, protein, peptide, amino acid residue, and dye; and (c) delivering the conjugate to a cell.
- 15. (Previously Presented) The method of claim 14, wherein the aminoglycoside comprises a cyclic acetal.
- 16. (Original) The method of claim 14, wherein the guanidinylating reagent comprises a guanidine or alkylguanidine moiety.
- 17. (Previously Presented) The method of claim 14, wherein the aminoglycoside comprises at least one cyclic acetal having the formula:

$$R_1 R_2$$
  $R_3$ 

wherein  $R_1$ ,  $R_2$ , and/or  $R_3$  groups comprise two or more 5- or 6-membered rings which are linked together by at least one acetal functional group and wherein  $R_1$ - $R_2$ , and  $R_3$  are the carbon atoms of two separate ring systems.

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18. - 19. (Cancelled).

- 20. (Previously Presented) The method of claim 17, wherein in treating the aminoglycoside, the guanidinylating reagent is reacted with at least one primary or secondary alcohol of the aminoglycoside to produce a guanidinoaminoglycoside.
- 21. (Original) The method of claim 20, wherein the guanidinylating reagent has the general formula:

$$P_1$$
 $N$ 
 $P_2$ 
 $P_3$ 

wherein each of  $P_1$ ,  $P_2$  and  $P_3$  is, independently, the same or different protecting group, each protecting group having the general structure:

wherein R<sub>2</sub> is a substituted or unsubstituted alkyl, aryl, or heterocyclic group.

- 22. (Previously Presented) The method of claim 17, wherein in treating the aminoglycoside, the guanidinylating reagent is reacted with at least one primary or secondary amine of the aminoglycoside to produce a guanidinoaminoglycoside.
- 23. (Previously Presented) The method of claim 22, wherein the guanidinylating reagent has the general formula:

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$$P_{1} \xrightarrow{H} C \xrightarrow{H} P_{2}$$

$$V \xrightarrow{SO_{2}} C$$

$$R_{1}$$

wherein  $R_1$  is trifluoromethyl group, and each of  $P_1$ ,  $P_2$  and  $P_3$  is, independently, the same or different protecting group, each protecting group having the general structure:

$$R_2$$
 $C$ 
 $C$ 
 $C$ 

wherein R<sub>2</sub> is a substituted or unsubstituted alkyl, aryl, or heterocyclic group.

- 24. (Cancelled).
- 25. (Previously Presented) The method of claim 14, wherein the aminoglycoside is selected from the group consisting of amikacin, gentamicin, kanamycin, neomycin, netilmicin, O-2,6-diamino-2,6-dideoxy-beta-L-idopyranosyl-(1 to 3)-O-beta-D-ribofuranosyl-(1 to 5)-O-[2-amino-2-deoxy-alpha-D-glucopyranosyl-(1 to 4)]-2-deoxystreptamine, streptomycin, and tobramycin.
- 26. (Previously Presented) The method of claim 14, wherein the therapeutically active compound is selected from the group consisting of a nucleic acid, nucleoside, protein, peptide, amino acid residue, lipid, carbohydrate, synthetic organic compound, metal, vitamin, small molecule, and dye, isotope, antibody, toxin and ligand.
- 27. (Previously Presented) The method of claim 14, wherein the therapeutically active compound comprises a nucleoside, wherein the nucleoside is a reverse transcriptase inhibitor.

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28. (Original) The method of claim 27, wherein the reverse transcriptase inhibitor is selected from the group consisting of 3'-azido-3'-deoxythymidine, 2',3'-dideoxyinosine and 2',3'-dideoxycytidine.

- 29. (Cancelled).
- 30. (Currently Amended) The method of elaim 27claim 14, wherein the guanidinoaminoglycoside is selected from the group consisting of guanidino-amikacin, guanidino-gentamicin, guanidino-kanamycin, guanidino-neomycin, guanidino-netilmicin, guanidino-O-2,6-diamino-2,6-dideoxy-beta-L-idopyranosyl-(1 to 3)-O-beta-D-ribofuranosyl-(1 to 5)-O-[2-amino-2-deoxy-alpha-D-glucopyranosyl-(1 to 4)]-2-deoxystreptamine, guanidino-streptomycin and guanidino-tobramycin.
- 31. (Currently Amended) The method of elaim 18 claim 17, wherein in treating the aminoglycoside, the guanidinylating reagent is reacted with at least one primary or secondary alcohol of the aminoglycoside to produce a guanidinoaminoglycoside.
- 32. (Cancelled).
- 33. (Previously Presented) The composition of claim 1, wherein the therapeutically active compound in the conjugate is covalently bonded to the adduct through a linker, wherein the linker is selected from the group consisting of a thiol linker and an amino acid linker.
- 34. 36. (Cancelled).

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37. (Previously Presented) The method of claim 14, wherein the therapeutically active compound in the conjugate is covalently bonded to the adduct through a linker, wherein the linker is selected from the group consisting of a thiol linker and an amino acid linker.

- 38. 42. (Cancelled).
- 43. (Previously Presented) The composition of claim 33, wherein the thiol linker is a dithiol.
- 44. (Previously Presented) The composition of claim 43, wherein the dithiol is β-mercaptoethylether.
- 45. (Cancelled).
- 46. (Previously Presented) The composition of claim 33, wherein the amino acid linker is glycine.
- 47. (Previously Presented) The method of claim 37, wherein the thiol linker is a dithiol.
- 48. (Previously Presented) The method of claim 47, wherein the dithiol is  $\beta$ -mercaptoethylether.
- 49. (Cancelled).
- 50. (Previously Presented) The method of claim 37, wherein the amino acid linker is glycine.